JULY 27, 2016

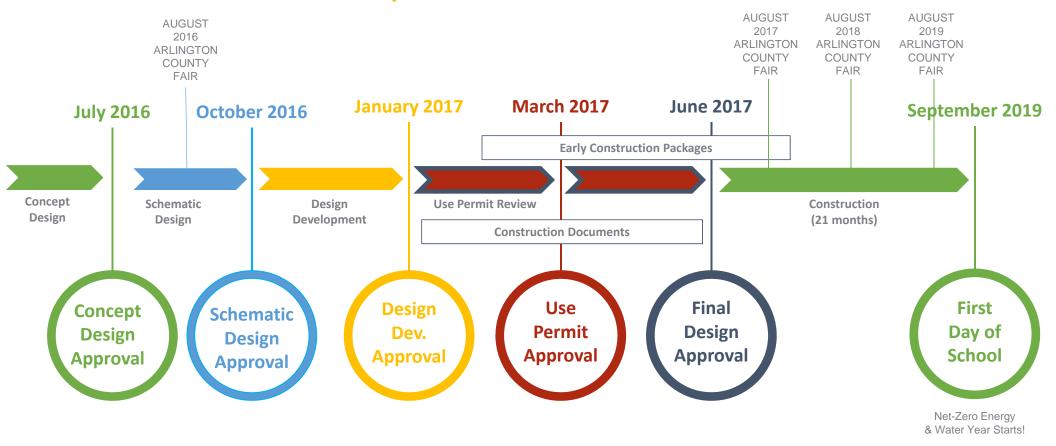
NEW ELEMENTARY SCHOOL AT THOMAS JEFFERSON MIDDLE SCHOOL

Joint BLPC - PFRC Meeting

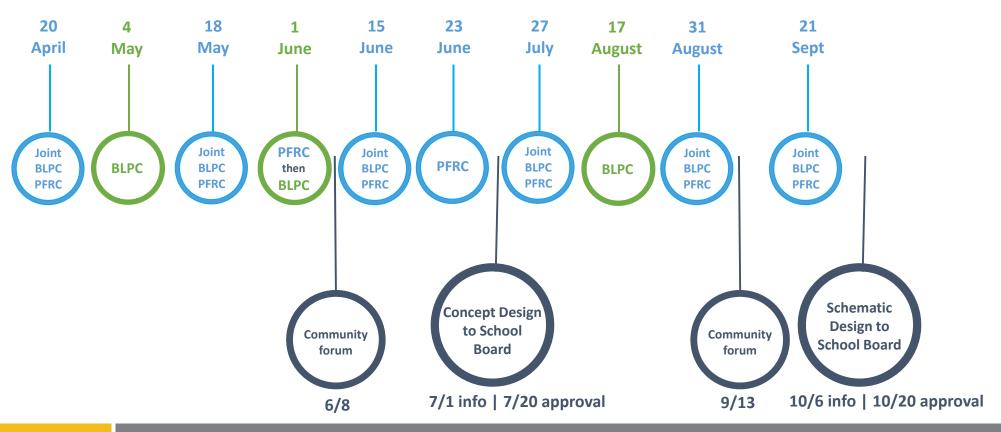
Project Parameters

- 1. New Elementary School for the Henry Community
- 2. Support Strategic Plan Goal #4 Provide Optimal Learning Environments
- 3. Address capacity by providing 725 seats
- 4. Open by start of school 2019
- 5. Multi-story building in northwest corner of site
- 6. Structured parking
- 7. Project cost \$59 million

General Schedule | Timeline



General Schedule | Timeline



Concept design was approved, but concerns exist about....

Lines of sight to middle school and theatre from SOG

Loss / lack of Canopy trees and viability of trees growing in "containers" on top of garage

Exploration of options to reduce the height of the garage

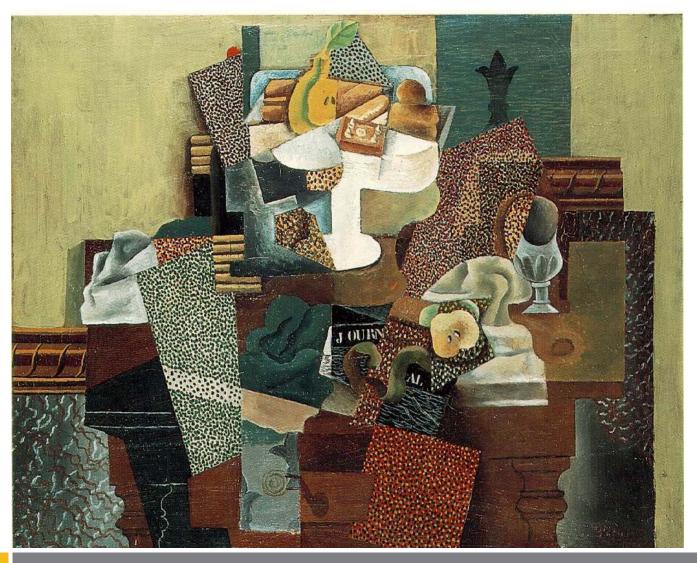
Exploration of options to fully submerge the garage

Universal design considerations

Impact of surface parking north of ES and the theatre

Impact of gym on neighbors

Footprint uses too much green / permeable space



Still life with fruit dish on a table. P. Picasso, 1914-15







Elementary school play surface over parking structure

Tallest height of play surface (at SW corner): 10.5 feet + 42" fence

Size of elevated ES playground south of building: 48,163 square feet

Variety of play surfaces: Non-crumb turf, poured rubber, pavers.

Natural surfaces in raised beds, including school gardens

Trees on play surface in raised containers



One level parking garage with 9 foot clearance.

Handicap van parking accommodated in garage (8'-2" clearance required)

- 8 HC total, 2 of which are van spots
- May still need curbside HC spots on SOG and HC spots north of theater

Combined drop off / pick up lane for elementary and middle school, opening out to a pedestrian mall with new accessible entrances to MS

Longest possible single file, on-site car queuing: 16 cars

+/- 225 parking garage spots with additional possible surface spots



Existing pervious surface: 38%

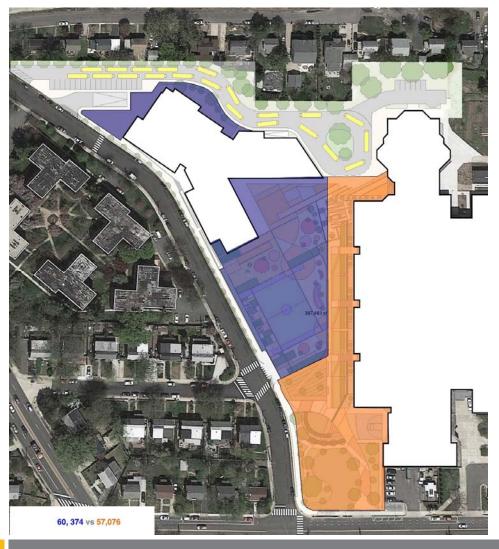
Proposed pervious surface: 16%

Stormwater would be treated in:

- Outdoor classroom in bus loop
- Bio-swale in pedestrian mall
- Outdoor classroom at SW corner

Stormwater would be retained in:

Underground tanks under bus loop driveway and new SW corner park

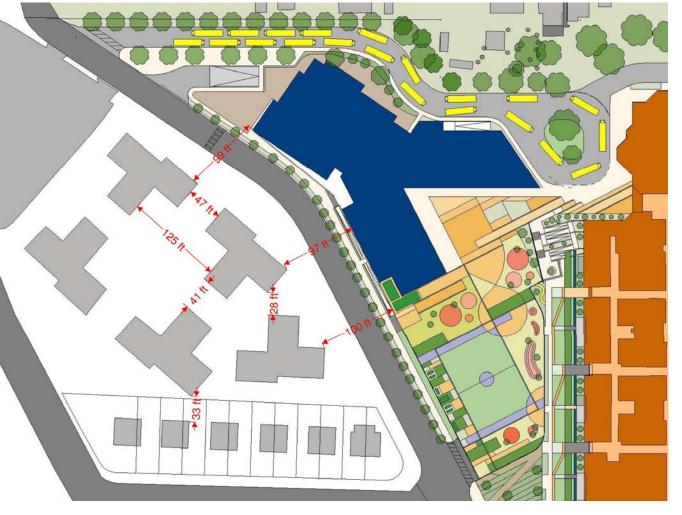


Middle School outdoor space on west side:

57,076 square feet

Elementary School outdoor space on west side:

60,374 square feet



Shortest distances from Arbors of Arlington to school building:

> North condo: 99 feet Center condo: 100 feet South condo: 180 feet

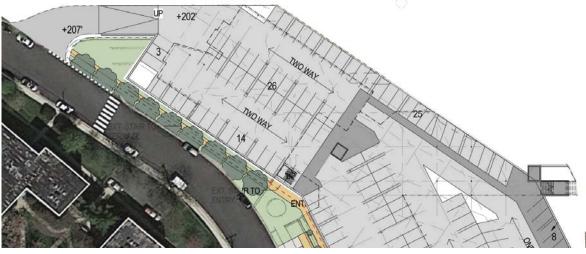
Shortest distances from Arbors of Arlington to school gym:

> North condo: 189 feet Center condo: 97 feet 110 feet South condo:

Shortest distances from Arbors of Arlington to elevated playfield:

> North condo: 303 feet Center condo: 150 feet South condo: 100 feet





Since our last BLPC / PFRC presentation on June 23rd....

Constructability and Cost review by Whiting Turner.

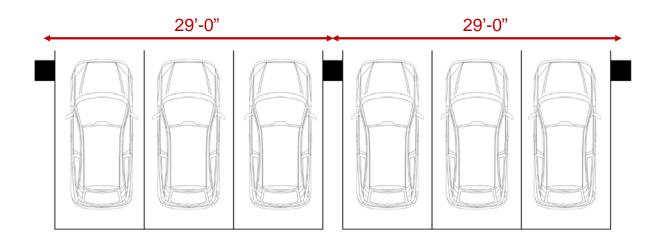
all cast-in-place concrete

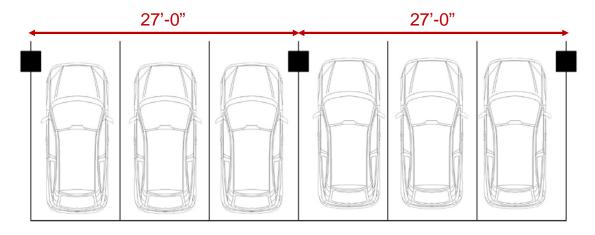
Added Rich & Associates of Detroit, MI as design consultants - national experts in parking garage design

- improved turning radii and sightlines
- added striped areas for pedestrian paths
- added a second elevator and stair
- changed from 27' grid to 29' grid

Net result:

225 garage spots reduced to 197, but could be achieved in a slightly thinner garage footprint





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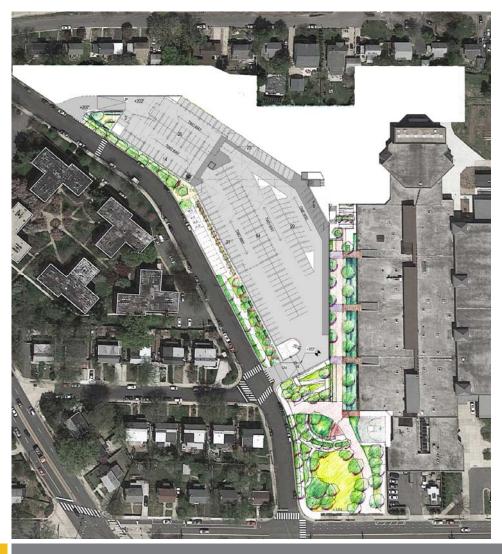
- improved turning radii and sightlines
- added striped areas for pedestrian paths
- added a second elevator and stair
- · changed from 27' grid to 29' grid

Net result:

225 garage spots reduced to 197, but could be achieved in a slightly thinner garage footprint



Approved Concept Design (Option A): parking level



One level parking garage with 7 foot clearance. Parking level lowered one foot. (maximum it can go and still open out to mall)

Handicap van parking NOT accommodated in garage, provided in 90 degree HC spots off South Old Glebe & HC spots north of theater.

Combined drop off / pick up lane for elementary and middle school, opening out to a pedestrian mall with new accessible entrances to MS

Longest possible single file, on-site car queuing: 22 cars

200 parking garage spots with additional possible surface spots



Elementary school play surface over parking structure shifted 15' east while maintaining a 50' wide pedestrian mall

Tallest height of play surface (at SW corner): 8 feet + 42" fence

Size of elevated ES playground south of building: 37,838 square feet

Variety of play surfaces: Non-crumb Turf, poured rubber, pavers.

Natural surfaces in raised beds, including school gardens

More shade trees in ground at SW & eastern edges of play surface

No ramps or stairs to front door of ES



Existing pervious surface: 38%

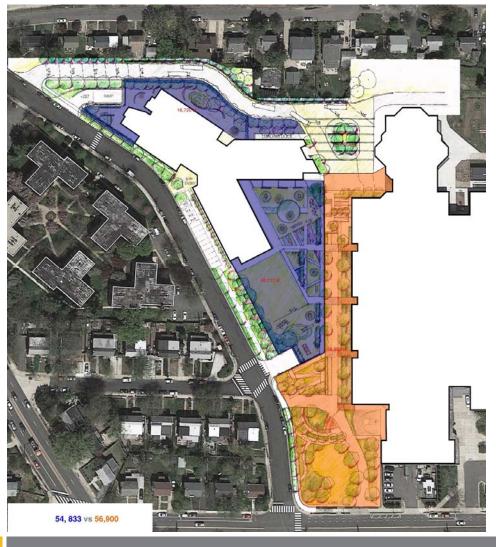
Proposed pervious surface: 17%

Stormwater would be treated in:

- Outdoor classroom in bus loop
- Bio-swale in pedestrian mall
- Outdoor classroom at SW corner
- Bio-swale b/w garage and SOG

Stormwater would be retained in:

 Underground tanks under bus loop driveway and new SW corner park



Middle School outdoor space on west side:

56,900 square feet

Elementary School outdoor space on west side:

54,833 square feet



Shortest distances from Arbors of Arlington to school building:

North condo: 105 feet Center condo: 110 feet South condo: 175 feet

Shortest distances from Arbors of Arlington to school gym:

North condo: 204 feet Center condo: 110 feet South condo: 114 feet

Shortest distances from Arbors of Arlington to elevated playfield:

North condo: 340 feet Center condo: 185 feet South condo: 120 feet



70% of elementary school play surface at natural grade

Series of retaining walls at 3 feet or less, and playground would be fenced.

Size of ES playground south of building: 38,391 square feet

Variety of play surfaces: Non-crumb turf, poured rubber, pavers.

Natural surfaces in ground including school gardens; all tress in ground

Not digging out along middle school & leaving SW corner as is (potential removal of parking lot)

22' wide drop off lane on SOG



Upper level of parking garage with 8.5 foot clearance. Handicap van parking accommodated on this level only. Probably want some ES HC parallel spots off South Old Glebe & HC spots north of theater.

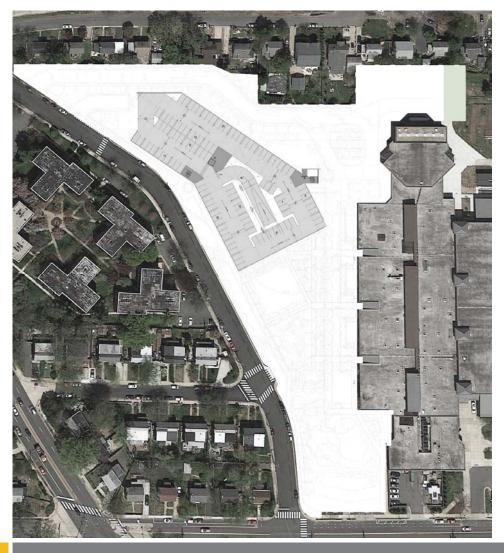
100% underground and one entry and exit point for vehicles

Two stairs and two elevators (same with all options)

No student drop off in garage

Longest possible single file, on-site car queuing in surface lane off SOG: 16 cars

111 parking spaces on this level



Lower level of parking garage with 7 foot clearance.

Bottom elevation of +190'-6". 13 feet below bottom level of TJMS, but garage held as far away from it as possible.

One ramp to lower level and a "loop circulation" layout

113 parking spaces on this level

224 total parking garage spots in underground parking structure with additional possible surface spots



Existing pervious surface: 38%

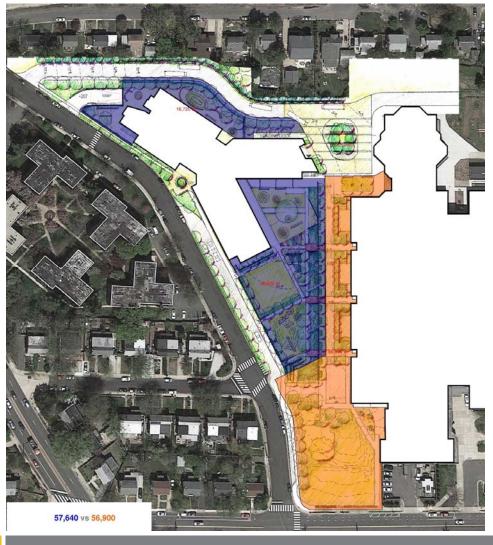
Proposed pervious surface: 23%

Stormwater would be treated in:

- Outdoor classroom in bus loop
- Prominent Bio-swale b/w ES and MS
- Outdoor classroom at south end of ES play area

Stormwater would be retained in:

 Underground tanks under bus loop driveway and a series of tanks under the bio-swale



Middle School outdoor space on west side:

56,900 square feet

Elementary School outdoor space on west side:

57,640 square feet



Shortest distances from Arbors of Arlington to school building:

> North condo: 105 feet Center condo: 110 feet South condo: 175 feet

Shortest distances from Arbors of Arlington to school gym:

> North condo: 204 feet Center condo: 110 feet South condo: 114 feet

Shortest distances from Arbors of Arlington to elevated playfield:

There is none!







Approved Concept Design (Option A) with double row of trees









27 July BLPC - PFRC Approved Concept Design (Option A) with double row of trees

















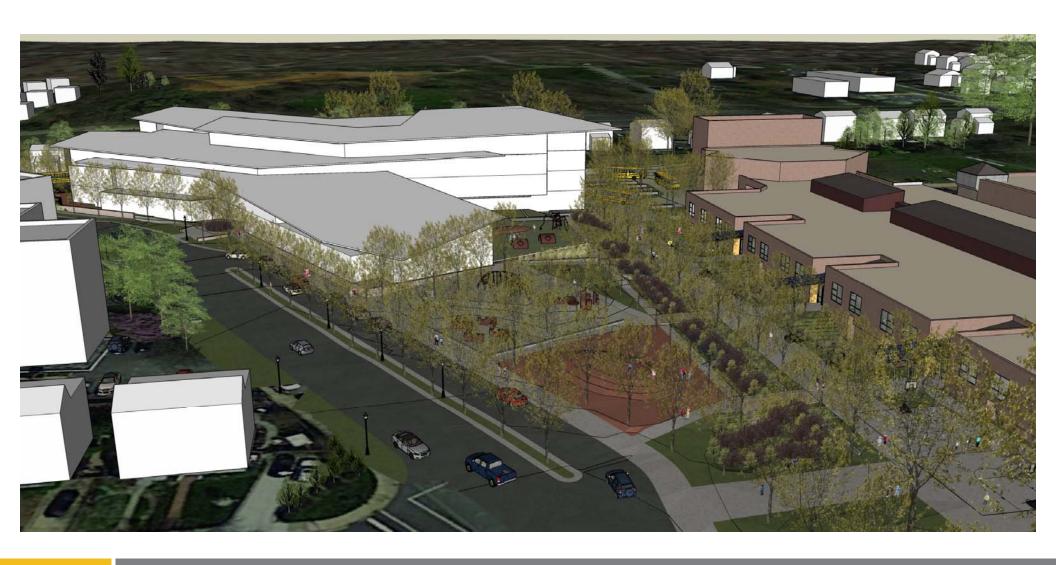












Option A 16% pervious



Option B 17% pervious



Option C 23% pervious



Option A 48,163 sf



Option B 37,838 sf



Option C 38,391 sf



Option A 60.3K sf ES | 57.0K sf MS



Option B
54.8K sf ES | 56.9K sf MS



Option C 57.6K sf ES | 56.9K sf MS



	Option A	Option B	Option C
Size of ES play area south of building	48,163 sf	37,838 sf	38,391 sf
Max height of ES play area south of building	10.5 feet	8 feet	At grade
At grade ES play area south of building	No	No	Yes
Total outdoor ES space on west side	60,374 sf	54,833sf	57,640 sf
Total outdoor MS space on west side	57,076 sf	56,900 sf	56,900 sf
Percent pervious	16%	17%	23%
Pedestrian mall w/ MS accessible entrances	Yes	Yes	No
Number of parking spots in garage	197	200	224
Additional surface spots (without SW corner lot)	5 + 6 = 11	5 + 6 + 14 = 25	5 + 6 = 11
Handicap van parking available in garage	Yes	No	Yes
Mechanically ventilated garage	No	No	Yes
Drop off lane in garage	Yes	Yes	No
Length of drop off lane queue (single file)	16 cars	22 cars	16 cars
Cost	same as Option C	about \$220K less	same as Option A

NEXT STEPS

August 17 BLPC

August 31 Joint BLPC – PFRC

September 13 Community Forum

September 21 Joint BLPC - PFRC

October 6 Schematic Design info item to School Board

ADJORN

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County Project Manager

Marco Rivero

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mrivero@arlingtonva.us

Web links:

APS Project Website

PFRC Project Website

Submit Public Comment and Sign up for Email Distribution